INTERNATIONAL BULLETIN
OF PLANT PROTECTION

1933 No. 12

DISCOVERIES AND CURRENT EVENTS *

French North Africa: The Desert Locust (*Schistocerca gregaria*) (1).

ALGERIA.

No information has been received from the regional Station of Algiers with regard to the months of August and September 1933.

8 October 1933. — A swarm coming from the S. passed Ouallem (Adrar) in the evening, flying N.

22 October 1933. — A small red swarm settled at 7 a. m. at Reggan (Adrar).

A very large swarm coming from the S. passed at 10 a. m. over Reggan (Adrar), flying N.

25 October 1933. — A small pink swarm coming from the S. E. settled at 8 a. m. at Timimoun.

26 October 1933. — A dense red swarm settled on the Touat de Reggan (Adrar).

A pink swarm coming from the S. settled on the palm plantation of Beni Abbès.

27 October 1933. — A large red swarm settled in the morning at Tabelbala. Flew N. with a violent wind.

29 October 1933. — Two red swarms coming from the S. settled at 4 p. m. at Nebka, Ouallem and El Bour (6 to 30 kilometres S. W. of El Goléa).

A red swarm settled along the El Goléa-In Salah track between 45 and 70 kilometres from El Goléa.

MOROCCO.

19 October 1933. — A pink swarm coming from the S. passed Igherm, flying N. It crossed the plain of the Souss between the 25th and 30th and settled at Ida ou Tanan on 1 November.

* Under this and the next heading the countries are arranged in French alphabetical order.

(1) Communication from the Government General of Algeria (Direction des Services Economiques) to the International Institute of Agriculture.

French West Africa: The Desert Locust (*Schistocerca gregaria*) in Mauritania (1).

A very large red swarm coming from the S. W. passed on 23 October over Atar flying N. E.

French West Africa: Parasites of Plants Cultivated in the Ivory Coast (2).

I. — Tree and Industrial Crops.

Coffee.

Fomes lignosus Klotzch
Fomes lamaoensis Murrill
Heterodera radicicola Müll.
Cercospora coffeicola Berk. et Cooke
Leptosphaeria coffeicola Del.
Sphaerella coffeicola Cooke
Gloeosporium coffeanum Del.
Capnodium coffeae Pat.?
Cephaleuros virescens Kunze.
Marasmius scandens
Trachysphaera fructigena Tabor et Bunting
Loranthus lanceolatus P. Beauv.

Cacao.

Armillariella mellea (Vahl) Pat.
Lasiodiplodia theobromae (Pat.) Griff. et Maubl.
Corticium (salmonicolor?)
Physiological disease.
Colletotrichum brachytrichum Del.?
Phyllosticta theobromae d'Alm. et S. da Cam.?
Cephaleuros virescens Kunze.
Phytophthora palmivora Butl.
Trachysphaera fructigena Tabor et Bunting
Nectria sp.
Colletotrichum sp.
Marasmius scandens
Marasmius equicrinis Müll.
Loranthus lanceolatus P. Beauv.

Oil Palm.

Perisporiaceae, species unidentified.

Kola.

Cephaleuros virescens Kunze
Nectria sp.
Lasiodiplodia theobromae (Pat.) Griff. et Maubl.
Marasmius equicrinis Müll.
Loranthus lanceolatus P. Beauv.

Cotton.

Bacterium sp.
Phoma roumii Fron
Lasiodiplodia theobromae (Pat.) Griff. et Maubl.
Pseudomonas (Bacterium) malvacearum?
Sclerotium sp.
Uredo (Kühneola) gossypii Lag.
Mycosphaerella (Ramularia) areola Ehrlich et Wolf.
Virus disease.
Glomerella gossypii Edgerton

Castor Oil.

Sclerotium sp.
Oidium sp.

(1) Communication from the Government General of Algeria (Direction des Services Economiques) to the International Institute of Agriculture.

(2) Communication from the official correspondent of the Institute, M. A. Mallamaire, Ingénieur d'Agronomie Coloniale, Director of the Phytopathological Laboratory, Bingerville, Ivory Coast.

II. — Fruit Crops.

Banana.

Gloeosporium musarum Cooke
Pseudomonas musae?
Marasmius stenophyllus Mont. (*M. semiustus* Massee).
Tylenchus (*musicola*?)

Pineapple.

Imperfect fungus, unidentified.

III. — Food Crops.

Plantain.

Same diseases as the banana ; but hardier.

Cassava.

Cercospora cassavae Ell. et Ev.
Colletotrichum manihotis Hennings
Virus disease.

Taro.

Cercospora sp.
Phyllosticta colocasiae
Pythium aphanidermatum (Eds.) Fitz.

Yam.

Cercospora sp.

Maize.

Ustilago maydis (DC.) Corda
Diplodia zeae (Schw.) Lév.
Helminthosporium turcicum Pass.

Groundnut.

Cercospora personata Ellis
Virus disease.
Sclerotium (*Corticium*) *rolfsii* Sacc.
Colletotrichum sp.

IV. — Leguminous Cover Crops.

Tephrosia candida.
Lasiodiplodia theobromae (Pat.) Griff. et Maubl.
Loranthus lanceolatus P. Beauv.

Tephrosia ehrenbergiana.
Meliola bicornis Wint. var. *tephrosiae* Beeli

Mucuna utilis.
Cercospora mucunae Syd.
Sclerotium (*Corticium*) *rolfsii* Sacc.

Centrosema plumieri.
Bacterium sp.

Cassia hirsuta.
Sclerotium sp.

V. — Vegetables.

Tomato.

Cladosporium fulvum Cooke
Bacterium briosii Pavar.
Tylenchus sp.

French bean.

Isariopsis griseola Sacc.
Sclerotium sp.

Cabbage.

Alternaria brassicae (Berk.) Sacc.
Sclerotium sp.
Bacterium sp.

Celery.

Septoria apii (Br. et Cav.) Rostr.
Cercospora apii Fr.
Bacterium sp.
Sclerotium (*Corticium*) *rolfsii* Sacc.

Asparagus.

Fusarium sp.

Egg Plant.

Tylenchus sp.

Cardoon.

Sclerotium sp.

Various Salad Plants.

Heterodera radicicola Müll.

Turnips.

Sclerotium sp.
Bacterium sp.

Eritrea: The Tropical Migratory Locust (*Locusta migratoria migratorioides*) (1).

During October 1933 no locust swarms were reported within the territory of the Colony.

A few hopper bands only of *Locusta migratoria migratorioides* made their appearance in certain localities of the Seraé and the western plain, and more precisely about 7 October in the vicinity of Dega, Ducambia, Barentù, on the 11th in the Mai-Tzade and the Medri-Uod-Seberà (Seraè) ; on the 21st at Meraz in the Cohain ; on the 27th at Ghirghif (Gullui).

Damage to crops has been slight. Rapidly organised native gangs destroyed a great number of hoppers.

United States of America: Further Distribution of Tobacco Downy Mildew in 1933 (2).

During this season downy mildew of tobacco (*Peronospora hyoscyami*) spread west of the Appalachian Mountains into the tobacco producing regions of Tennessee. The history of this disease during the past three years shows it occupying a somewhat wider range each year. It will be remembered that in 1921 this disease, long known in Australia, appeared in a few plant beds in west Florida and south Georgia. While it caused much alarm little actual damage was done and the disease was not again seen until ten years later.

In 1931 (See *International Bull. Plant Protection* (5 : 183-184) October, 1931) the disease reappeared in areas infected ten years earlier and spread through

(1) Communication from the official correspondent of the Institute, Dr. Rolando Guidotti, Chief of the Agricultural Bureau of Eritrea, Asmara, transmitted by the Government of the Colony.

(2) Communication from the official correspondent of the Institute, Dr. Neil E. Stevens, Senior Pathologist, Plant Disease Survey, Bureau of Plant Industry, United States Department of Agriculture, Washington.

much of the tobacco growing region of the Carolinas, reaching southern Virginia and Maryland. Actual commercial damage was slight as few plants were killed.

In 1932, the disease was both more widespread and more destructive than in 1931. Losses in Georgia and the Carolinas were so severe as to materially reduce the crops. The disease was found throughout a large portion of the eastern Virginia and Maryland tobacco areas and was found in two beds in Lancaster County, Pennsylvania. (See *International Bull. Plant Protection* (6 : 180-181) November, 1932).

This year (1933) while the disease was very abundant in the Carolinas and Georgia, the actual commercial loss appears to have been minimized in this region by the fact that growers generally, in anticipation of a recurrence of this disease, had a considerable excess of plant beds.

The range of the disease was, however, greater than ever before. It was again found as far north as Lancaster County, Pennsylvania, in somewhat greater abundance than previously. And was widely distributed in southwestern Virginia and eastern Tennessee. In Tennessee the disease was found scattered over twenty-two counties.

Latvia: The Destruction of Barberry and Buckthorn (1).

With a view to the control of cereal rusts (*Puccinia graminis* Pers. and *P. coronifera* Kleb.) which in our country cause losses estimated at 20,000,000 Ls. annually, the Parliament of Latvia passed on 11 March 1930 a law for the destruction of barberry (*Berberis vulgaris* L.) and buckthorn (*Rhamnus cathartica* L.). This law was published in the official gazette (' Valdibas Vestnesis ') No. 65 of 20 March 1930 and was completed by instructions published also in 1930 (No. 120).

In accordance with this law *Berberis vulgaris* L., *B. vulgaris* L. var. *atropurpurea* Hort. and *Rhamnus cathartica* L. should have been completely eradicated throughout the country by 20 March 1933. They should have been already destroyed before 20 March 1931 at least in the arable land or within a radius of 200 m around arable land, in gardens, promenades, nursery gardens, parks, cemeteries, meadows and pastures.

The destruction of the plants required by the law must be carried out by the owners of the land or, in the case of State-owned land, by the usufructuary. If the persons responsible do not comply with the requirements within the time fixed by the law the destruction may be carried out at their expense by the State. Culture of the plants in question for scientific purposes is allowed only with authorisation of the Minister of Agriculture. The Minister of Agriculture may also as an exceptional measure concede a prolongation of the term fixed and will supervise the carrying into effect of the law. In State-owned forests the plants are to be destroyed by the Department of Forests.

(1) Communication from the official correspondent of the Institute, Mr. L. Gailitis, cand. rer. nat., Director of the Entomological Department of the University, Riga.

On 20 March 1933 the period of three years fixed by the law for the destruction of these noxious plants was terminated. The Minister of Agriculture, taking into consideration that even at the time of the passing of the law it appeared impossible that in three years the plants in question should be completely eradicated throughout the whole country, consented in 1932 to postpone the date for complete eradication to 20 March 1935. With a view to encouraging the work of destruction on private and communal property the Council for Plant Protection of the Ministry of Agriculture decided to require the officials of the Department of Forests and of the Ministry of Agriculture to remind all individuals and institutions of the necessity of giving effect to the law and, in cases of opposition on their part, to notify the Ministry of the names of the persons concerned in order that they may be held responsible and the work carried out at their expense.

Up to the present the most extensive work has been carried out by the Department of Forests on the 1,768,857 hectares of land under its administration. The 82 forest centres have reached the following figures in the course of the three years ending 20 March 1933 :—

Species	Number of forest centres	Number of plants located	Number of plants destroyed	Number of plants remaining after 20 March 1933
Berberis vulgaris L.	50	70 863	50 905	17 958
Rhammus cathartica L.	59	337 664	250 817	86 847
Total . . .	109	408 527	303 722	104 805

The cost of the work carried out by the Department of Forests amounts to 24,621 Ls., that is to an average of 8 ' Santim ' per bush. In general common salt has been used for the destruction of the plants, at the rate of 3-5 kg per bush. In places where the salt might have been devoured by livestock or game the ground was covered or sprinkled with paraffin. The use of salt has been avoided in certain places where it might constitute a danger to cultivated plants. Salt has been found ineffective on very moist soils on which it disappeared before it could be absorbed by the roots. Certain forest centres have combined the application of salt with grubbing the plants and applying salt to the holes. Without this application of salt a certain percentage of the bushes grew up again, necessitating a further grubbing.

The forest centres are required to survey over a period of ten years the places where bushes have been destroyed. The number of bushes located and destroyed is recorded in a special register. The methods used, the costs incurred and the observations of the persons carrying out the work are also entered. The forest centres must submit to the Department of Forests before 31 December of each year a report of the progress in the destruction of these noxious plants.

Southern Rhodesia: Locust Invasion, 1933 (1).

Monthly Report No. 10, September, 1933.

Tropical Migratory Locust (*Locusta migratoria migratorioides*).

No reports of this species have been received during the month.

Red Locust (*Nomadacris septemfasciata*).

Winged swarms have been prevalent in most parts of the colony and have exhibited considerable activity, but their flights have been limited and have followed no particular direction.

The eastern border of the colony is haunted by large swarms which cross and recross the border between the eastern districts and Portuguese territory.

On the main plateau of the colony the swarms come and go from various directions. The formation adopted is very loose and the swarms tend to cover very big areas. Locusts detached from definite swarms are to be met with freely in many localities.

Appreciable damage is reported in respect to irrigated crops in certain parts of the colony.

At the end of the month the females mostly show the beginning of ovary development whilst the males have advanced considerably further in the direction of sexual maturity.

The colour of the locusts remains deep red and the purplish pink suffusion at the base of the hind wings is now well developed.

There are as yet no indications that egg-laying is imminent.

Rumania: The San José Scale (2).

Crop inspections carried out by the organisations of the Plant Protection Service have revealed the presence of the San José scale (*Aspidiotus perniciosus*) in Rumania.

Up to the present it has been observed in the following regions:—

Commune	Department
Pațal	Sălaj
Boianul Mare	»
Oarța de Jos	»
Simlăul	»
Satu Mare	Satu-Mare
Salonta	Bihor
Ghioroc	»
Arpășel	»

(1) Communication from the official correspondent of the Institute, Mr. Rupert W. Jack, F. E. S., Chief Entomologist, Department of Agriculture, Salisbury, Southern Rhodesia.

(2) Communication from the official correspondent of the Institute, Prof. G. Arion, Chief of the Plant Protection Service, Ministry of Agriculture and Estates, Bucharest.

Commune	Department
Timişoara	Timiş-Torontal
Ceanad	»
Tarnok	»
Beta	»
Gătaia	»
Haţeg	Huniedoara
Bucov	Prahova
Mehadia	Severin
Iablonița	»
Bistra	»
	Caraş

This scale insect has certainly been present in certain of these regions (Salonta, Timişoara) for some years. In other regions (Bucov), on the contrary, it has been present only one or two years.

The San José scale is spreading in Rumania from west to east, which seems to indicate that the principal infection must be towards the western frontier.

As *A. perniciosus* has been reported for some years in Austria and Hungary, it is probable that the infection was brought in from these countries, with which Rumania has an active trade.

LEGISLATIVE AND ADMINISTRATIVE MEASURES

French West Africa (Ivory Coast) (1). — In virtue of the Decree of 28 July 1933, No. 2099 A. E., with a view to preventing the spread of diseases of the banana and more particularly of those known as stem rot (*Marasmius stenophyllus*) and Panama disease (*Fusarium cubense*), the sale and transport of banana suckers coming from plantations known to be infected are prohibited.

Any person producing banana suckers for purposes of sale is required to have his plantation inspected by an agent of the Service of Agriculture.

The sale and circulation of banana suckers may be authorised only on presentation of a certificate of phytosanitary inspection, detached from a counterfoil register, issued by the agent of the Service of Agriculture and stating that they do not come from a plantation infected with either of the diseases specified above.

This certificate is valid only for three months, after which a further inspection is required.

Requests for inspection of banana plantations must be addressed by the planters to the Lieutenant-Governor. Inspection will be carried out free of charge.

On any plot on which either of the diseases is found to be present burning of infected stools on the spot in the presence of the agent of the Service of Agriculture is obligatory, and of all stools within a radius of not less than 10 metres of the centre of infection. It is forbidden to re-plant the said plot with bananas within two years.

(1) Communication from the official correspondent of the Institute, Mr. A. MALLAMAIRE, Ingénieur d'Agronomie Coloniale, Director of the Phytopathological Laboratory, Bingerville, Ivory Coast.

French West Africa (French Guinea). — A Decree of 13 July 1933 carries regulations for the inspection of living plants presented for importation into French Guinea. (*Bulletin Mensuel de l'Agence Economique de l'Afrique Occidentale Française*, Paris, 1933, 14e année, nº 152, p. 264).

French West Africa (French Sudan). — A Decree of 22 August 1933, followed by instructions from the Governor of the Colony, provides for the organisation of locust reporting and control over the territory of the French Sudan. (*Ibid.*, nº 154, p. 328).

Germany (1). — A Decree of 3 October 1933, entered into force on 1 November 1933, amending the provisions of the Decree of 23 February 1932 which is intended to prevent the introduction of the Colorado beetle (*Leptinotarsa decemlineata*) from France [see this *Bulletin*, 1932, No. 4, pp. 56-57], prescribes a new model for the certificate of origin and health which must accompany any consignment of fresh vegetables and other such products and those containing fresh aerial parts of plants.

Germany (Prussia). — By Law of 29 June 1933 small amendments have been introduced into the Law of Agricultural and Forest Policy of 1 April 1880.

Inter alia, the right is conferred on the competent Minister and police authorities to issue ordinances relating to the protection or control of certain animal and plant species recognised respectively to be useful or dangerous. For this purpose the Minister is authorised to modify or amplify the regional regulations, more particularly those relating to game. (*Nachrichtenblatt für den Deutschen Pflanzenschutzdienst*, Berlin 1933, 13. Jahrg., Nr. 11, S. 97).

*** By Police Ordinance of 28 July 1933, relating to the protection of bees, it is forbidden to spray flowering fruit trees with arsenic-containing materials.

Trees in the proximity of hives shall be sprayed only in the evening when the bees are no longer on the wing and by arrangement with the owner of the bees.

This Ordinance came into force on 1 August 1933 and will cease to be effective on 31 July 1943. (*Amtliche Pflanzenschutzbestimmungen*, Berlin 1933, Bd. V, Nr. 4, S. 112).

England and Wales. — With the object of preventing the introduction of diseases which might prove injurious to forest trees, the Importation of Elm Trees and Conifers (Prohibition) Order of 1933, dated October 24, 1933, which comes into operation on December 1, 1933, prohibits the landing in England or Wales from any country other than Scotland, Northern Ireland, the Irish Free State, the Isle of Man or the Channel Islands, of any living plants of the genera *Abies*, *Larix*, *Picea*, *Pinus*, *Pseudotsuga*, *Sequoia*, *Thuja* and *Tsuga*.

The Importation of Elm Trees (Prohibition) Order of 1926 [see this *Bulletin*, 1927, No. 2, p. 24] is now revoked, but its provisions have been embodied in the new Order.

(1) Communication from the Biologische Reichsanstalt für Land- und Forstwirtschaft, Berlin-Dahlem, official correspondent of the Institute.

The health certificates prescribed under the Importation of Plants Order of 1933 [see this *Bulletin*, 1933, No. 11, pp. 250-251] to accompany living plants imported from abroad must include a statement to the effect that the consignment does not contain any plants of the genera now prohibited. (*Statutory Rules and Orders, 1933, No. 1011. Destructive Insect and Pest, England. The Importation of Elm Trees and Conifers (Prohibition) Order of 1933. Dated October 24, 1933.* London, 1933, 2 pp.).

Canada. — A circular of the Secretary, Destructive Insect and Pest Act Advisory Board, Department of Agriculture, Ottawa, dated 28 July 1933 and addressed to importers in British Columbia, informs that on 1 August 1933 the Federal Department of Agriculture will take over the Horticultural Inspection Service in connection with the inspection of import and export shipments of plants and plant products. No charge will be made for the inspection of importations, but, on the other hand, the importer will be required to furnish any necessary labour incidental to inspection. Arrangements are being made for the inspection of shipments at the port of first arrival, at Vancouver, or on the premises of the importer.

In the case of deciduous plants originating in countries where the San José scale [*Aspidiotus perniciosus*] is known to exist (including United States and Asia), all importations of this nature will be routed on Vancouver for fumigation as a safeguard to the fruit-growing sections of the province. (In the case of such shipments, the transportation charges to and from the fumigation station will have to be borne by the importer).

The Head Office of the Inspection Service in Vancouver will be maintained at the Court House. An Inspector will also be maintained at the port of Victoria.

Importers of nursery stock will be required to continue to apply for permits to cover such importations. Applications for permits should be addressed as formerly to: The Secretary, Destructive Insect and Pest Act Advisory Board, Department of Agriculture, Ottawa.

In the case of interprovincial shipments of nursery stock, that is, plants originating in Canada and consigned to points in British Columbia, as this is a matter within the jurisdiction of the British Columbia Department of Agriculture, any modifications in regard to the Regulations dealing with such shipments will be issued by the Provincial Department. (Canada. Department of Agriculture. Destructive Insect and Pest Act Advisory Board. Circular to Importers in British Columbia re Transfer of Inspection Service. Ottawa, July 28, 1933, 1 p. [Mimeographed]).

Danzig. — By Decree of the Senate, dated 7 October 1933, trade in potatoes, with the exception of retail and itinerant trade, will be allowed only with special authorisation granted on request to persons recognised to be expert in the matter and sufficiently reliable. The authorisation may be withdrawn if the dealer fails to comply with the regulations or does not fulfil the necessary requirements. (*Nachrichtenblatt für den Deutschen Pflanzenschutzdienst*, Berlin 1933, 13. Jahrg., Nr. 11, S. 97-98).

Scotland. — The Colorado Beetle (Scotland) Order of 1933, dated 24 August 1933, contains measures similar to those decreed in England by the Colorado Beetle Order of 1933, dated 23 August 1933 [see this *Bulletin*, 1933, No. 11, pp. 251-252] relating to the control of *Leptinotarsa decemlineata*. (*Statutory Rules and Orders, 1933, No.838, S. 46. Destructive Insect and Pest, Scotland. The Colorado Beetle (Scotland) Order of 1933. Dated August, 24, 1933.* London, 1933, 5 pp.).

Morocco (French Zone). — By Decree of the Director of Waters and Forests, dated 11 September 1933, owners or holders of land included within the recognised zones of the civil control of the Zemmour are authorised to destroy, by any means except fire, rabbits causing damage to their crops. The present Decree will remain effective until the last day of the close season of 1934. (Empire Chérifien. Protectorat de la République Française au Maroc. *Bulletin Officiel*, Rabat, 22 septembre 1933, XX^{ème} année, n° 1091, p. 940).

*** By Viziriel Decree of 13 September 1933 (22 joumada I 1352) the utilisation of plants, that is to say of any plant or part of a plant, wild or cultivated, which have received no industrial treatment of chemical or mechanical nature, and especially of hay or leaves, is forbidden for purposes of containing, packing, wrapping, decorating, protecting, conditioning or making up weight of products or objects of any sort intended for importation of transit in the French zone of the Cherifien Empire.

Exceptions to the above ruling will be allowed in the case of the following plants :—

Straw of wheat (*Triticum* spp.), of barley (*Hordeum* spp.), of oats (*Avena* spp.), of rye (*Secale cereale*) ;

Straw of rice (*Oryza* spp.) when coming from French West Africa ;

Wrappings made with leaves of the date palm (*Phoenix dactylifera*) ;

Esparto grass (*Stipa tenacissima*) ;

Stems of the common reed (*Arundo Donax*) if barked, defoliated and split ;

Coconut fibre (*Cocos nucifera*) ;

Roots of ferns belonging to the genera *Polypodium, Pteris, Osmunda* ;

Osiers (species of the genus *Salix* used in basket making) ;

Plants belonging to the various species of the Hypnaceae and Bryaceae (commonly known as mosses) and of the Sphagnaceae (sphnagnum) ;

Leaves of species of the genera *Clinogyne* (Scitamineae) and *Mitragyna* (Rubiaceae) when used as packing material for kola nuts.

Subject to the application of the regulations relating to plant sanitary policy and the control of plant parasites, the entry of hays into the French zone is authorised only in the form of mechanically pressed bales bound with iron wire.

Products or objects which are not packed in accordance with the requirements of the present Decree will be returned or destroyed, as preferred by the consignee or his representative, in conformity with the provisions of Article 7 of the Dahir of 20 September 1927 (23 rebia I 1346).

The agents of the Plant Protection Service and Phytosanitary Inspection may however authorise in exceptional cases the entry of products or objects of metal or made with inorganic substances the packing of which is not in accordance with the above requirements. But in such a case the consignee is required to carry out the measures demanded by the agents with a view to preventing the introduction of parasites. These measures will in every case include the destruction of the materials which have been used to pack, wrap, decorate or contain the said products or objects. (*Ibid.*, 13 octobre 1933, nº 1094, p. 1017-1018).

*** By Decree of the Director General of Agriculture, Commerce and Land Settlement, dated 21 September 1933, any person selling resins or resinates for use in the control of plant parasites must indicate on the delivery note or invoice, on the wrappings, containers or packages and on the advertisements, posters or price lists :— (1) the content in total resin of the product sold, expressed in colophony ; (2) the content in water-soluble combined resin, expressed in colophony ; (3) the content in carbonate or free alkali, expressed in anhydrous sodium carbonate ; (4) the content in water. (*Ibid.*, 29 septembre 1933, nº 1092, p. 963).

*** A Decree of the Director General of Agriculture, Commerce and Land Settlement, dated 28 September 1933, annuls the Decree of 12 June 1928 enumerating the plant parasites which must appear on the certificates of sanitary inspection accompanying plant products on entry into the French Zone of the Cherifien Empire. (*Ibid.*, nº 1094, p. 1020-1021).

*** A Decree of the Director of Waters and Forests of the same date authorises owners and holders of land situated within the jurisdiction of the civil control circumscription of Taza-banlieue to destroy wild boars on their land at any time and by any means except fire. (*Ibid.*, nº 1094, p. 1021).

Yugoslavia. — By Decree No. 27230/11 of 1 May 1933, modifying the provisions of Decree No. 60367/11 of 23 July 1931, it is forbidden to import fruit trees and their fruits, ornamental and other trees and shrubs from the following countries : North and South America, Australia, Japan, China, the Hawaiian Islands, Hungary and Austria, unless authorisation has been previously obtained from the Ministry of Agriculture.

A request for authorisation for importation addressed to the Ministry must be accompanied by a certificate from the Plant Protection Service of the country of origin stating that the place of origin of the consignment is free from the following insects : *Aspidiotus perniciosus* and, except in the cases of Austria and Hungary, *Leptinotarsa decemlineata, Popillia japonica, Phthorimaea operculella.*

Consignments the importation of which has been authorised may be delivered to the consignees only after inspection by an expert appointed by the Ministry. It is necessary to indicate in the request addressed to the Ministry the place where it is desired that the customs formalities and delivery of the consignment should be made. (*Deutsches Handels-Archiv*, Berlin 1933, 87. Jahrg., 2. Oktoberheft, S. 2950-2951).

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[With summary in English. *Phoma ? heteromorpha* Sch. et Sacc. (1884) is transferred by the writer into the genús *Ascochyta* under the name of *A. heteromorpha* (Sch. et Sacc.) n. c. *Ph. oleandrina* Delacr. (1905) is a synonym of *A. heteromorpha* which has also been observed at Rome and in its vicinity as a pest of the oleander (*Nerium oleander*)].

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[See this *Bulletin*, 1933, No. 4, p. 93. *Sideridis zeae* has never been taken in Italy before. The caterpillar has been found elsewhere only exceptionally on maize. The 'nottua del granoturco' (maize Noctua) reported for Italy by Italian and foreign writers is therefore not *S. zeae*, but rather *Sesamia cretica* and more rarely *S. vuteria*. Thus *S. cretica* is the only Noctua genuinely injurious to maize in Italy].

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